

Micro Commercial Components 21201 Itasca Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939 FST19035 THRU FST19050

Features

- · Metal of siliconrectifier, majorty carrier conducton
- Guard ring for transient protection
- Low power loss high efficiency
- · High surge capacity, High current capability

200 Amp Schottky Barrier Rectifier 35 to 50 Volts

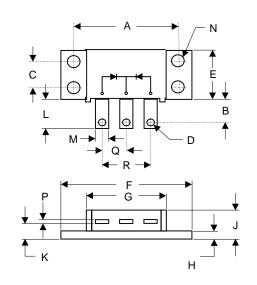
Maximum Ratings

- Operating Temperature: -65°C to +150°C
- Storage Temperature: -65°C to +150°C

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
FST19035	35V	24.5V	35V
FST12040	40V	28V	40V
FST12045	45V	31.5V	45V
FST12050	50V	35V	50V

E	Electrical Characteristics @ 25°C Unless Otherwise Specified							
	Average Forward Current	I _{F(AV)}	200 A	T _A = 12 <i>6</i> °C				
	Peak Forward Surge Current	I _{FSM}	1500A	8.3ms, half sine				
	Maximum Instantaneous Forward Voltage	V_{F}	.70V	I _{FM} = 100.0A; T _A = 25°C				
	Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	4mA	T _A = 25°C				
	Typical Junction Capacitance	C₃	340pF	Measured at 1.0MHz, V _R =4.0V				

POWERMOD

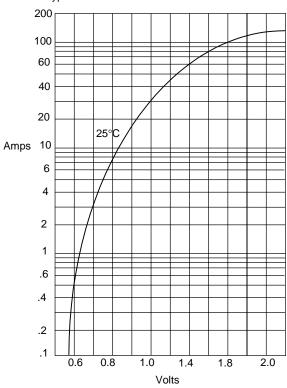


DIMENSIONS								
	INCH ES		ММ					
DIM	MIN	MAX	MIN	MAX	NOTE			
Α	1.995	2.005	50.67	50.93				
В	.330	.325	7.62	8.26				
С	.495	.505	12.57	12.83				
D	.182	.192	4.62	4.88				
E	.990	1.010	25.12	26.65				
F	1.490	1.510	37.85	38.35				
G	1.500	1.525	38.10	38.70				
H	.120	.130	3.05	3.30				
J		.400		10.16				
K	.240	.260	6.10	6.60				
L	.490	.510	12.45	12.95				
М	.330	.350	8.38	6.90				
N	.175	.195	4.45	4.95	Ø			
Р	.035	.045	0.89	1.14				
Q	.445	.455	11.30	11.56				
R	.890	.910	22.61	23.11				

FST9035 thru FST19050



Figure 1 Typical Forward Characteristics



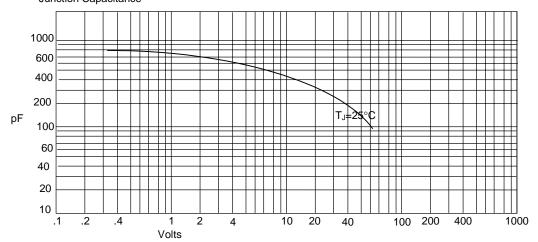
Instantaneous Forward Current - Amperes *versus* Instantaneous Forward Voltage - Volts

Figure 2 Forward Derating Curve 200 160 120 80 Amps 40 20 Single Phase, Half Wave 60Hz Resistive or Inductive Load 50 70 90 110 130 150

Average Forward Rectified Current - Amperes versus Ambient Temperature - $^{\circ}\text{C}$

°C

Figure 3 Junction Capacitance



Junction Capacitance - pF *versus* Reverse Voltage - Volts

FST19035 thru FST19050



Figure 4
Typical Reverse Characteristics

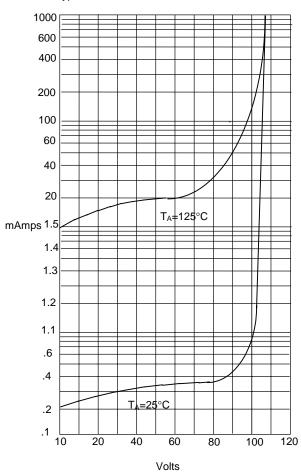


Figure 5
Peak Forward Surge Current

1500
1300
1000
800
200
0
1 2 4 6 8 10 20 40 60 80 100

Cycles

Peak Forward Surge Current - Amperes *versus* Number Of Cycles At 60Hz - Cycles

Instantaneous Reverse Leakage Current - MicroAmperes *versus* Percent Of Rated Peak Reverse Voltage - Volts